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**(54)OLIGONUCLEOTIDE FOR DETECTION OF
BACILLUS ANTHRACIS AND DETECTION
USING THE SAME**

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain a new oligonucleotide comprising an oligonucleic acid having a specific nucleic acid sequence and capable of proliferating a nucleic acid sequence characteristic to Bacillus anthracis and capable of discriminating and identifying Bacillus anthracis of pathogen of anthrax which is infectious disease common to human beings and beasts from other microorganisms.

SOLUTION: This new oligonucleotide has a nucleic acid sequence obtained from a nucleic acid sequence represented by the formula and comprising at least one part capable of proliferating a nucleic acid sequence characteristic to Bacillus anthracis and being a pathogen of anthrax which is a common infectious disease to human beings and

beasts, specifically proliferating gyrB gene of Bacillus anthracis which is clinically important and capable of discriminating and identifying from other genus Bacillus and bacterial strain other than the genus Bacillus and useful in detection, etc., of Bacillus anthracis. The oligonucleotide is obtained by cloning gyrB gene proliferated from Bacillus cereus JCM2152, Bacillus thuringiensis IAM12077 and Bacillus anthracis Pasteur no. 2-H, determining these base sequences and selecting a base sequence specific to Bacillus anthracis.

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GAAGGAGG GAAAGTGA GAGGAGG TTAAGGTT GTGAGGTT GAGGAGG	80
GAGGAGG TAAAGGTT TTAAGGTT GAGGAGG TTAAGGTT TTAAGGTT	120
AAAGGAGG TTAAGGTT GAGGAGG GTGAGGTT GAGGAGG TTAAGGTT	160
GAGGAGG TTAAGGTT GAGGAGG TTAAGGTT GAGGAGG TTAAGGTT	200
...	
TAAAGGTT TTAAGGTT GAGGAGG TTAAGGTT TTAAGGTT TTAAGGTT	1140
GAAGGAGG TTAAGGTT TTAAGGTT TTAAGGTT TTAAGGTT TTAAGGTT	1200
GAGGAGG AG	1212